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EXAMINER	
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ART UNIT	PAPER NUMBER
2111	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/664,388	KABENJIAN ET AL.	
	Examiner	Art Unit	
	Ryan M. Stiglic	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22 and 24-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22 and 24-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-22 and 24-34 are pending and have been examined.

2. Claims 1-22 and 24-34 are rejected.

Claim Objections

3. Claims 7 and 15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

4. Claims 32-34 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Response to Arguments

5. Applicant's arguments filed October 10, 2006 have been fully considered but they are not persuasive. The applicant contends (1) "there is no suggestion in either of the references that they (PRO II and Batta) be combined in the manner suggested by the Examiner" and (2) "both PRO II and Batta fail to disclose a housing configured to shield electromagnetic interference." In response to point (1) the Examiner relied on information that was well known to those skilled in the art at the time of applicant's invention to show guide-rails which attached to the side of drives are well known means for latching a drive to the computer chassis. The guide-rails

disclosed in Batta are screwed onto the side of 3.5" or 5.25" internal computer drives such that the installer need only slide the drive into place until a "snapping" noise is made thus signifying the drive has been securely latched in place. These guide-rails are very well known to those skilled in internal desktop computer drive design and would thus have been a known choice to ensure a computer drive is securely latched in an appropriate drive bay of the computer chassis. In response to newly added point (2) the Examiner will again rely on what was well known to those skilled in the art at the time of applicant's invention to show it would have been obvious to electromagnetically shield a computer drive installed in a drive bay of a computer chassis. Kawagoe et al. (US 5,282,099) describes in their description of PRIOR ART at the time of their invention (i.e. as of the filling date of August 30, 1991) "Generally, the disk drive apparatus of this kind includes a structural frame and a drive mechanism enclosed in the structural frame. The structural frame will also be referred to within as the housing or the closed housing. The mechanism include a magnetic disk, a spindle motor for rotating the magnetic disk, a carriage for supporting magnetic heads, a voice coil motor for driving the carriage to move the magnetic heads to a desired information track on the disk, and the like. The housing is formed of conductive material such as metal and conductive plastics to electromagnetically shield the mechanisms therein (col. 1, ll. 14-25)." Since the Atech-Flash PRO II clearly includes a structural frame/housing one of ordinary skill in the art would recognize the need to form the housing with conductive material (as evidenced by Kawagoe) in order to electromagnetically shield the PRO II device from external noise/interference.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claim 25-28 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atech Flash and their product "PRO II USB MULTI-SLOT CARD READER/WRITER" as evidenced by a product review on Steves-digicams.com dated May 09, 2002 in view of what was well known in the art at the time of applicant's invention as evidenced by Batta et al. (US005262923A).

For claims 25 and 28:

A USB flash bay for an information handling system, comprising:

- means for an external drive bay disposed within the information handling system (paragraph 1 of page 1);
- means for a USB flash bay including a USB port and a flash card slot (paragraph 1 of page 1);
- means for integrating the USB flash bay in the external drive bay (paragraph 1 of page 1); and
- means for connecting the USB flash bay with the information handling system (paragraphs 1-2 of page 1).

The various figures in the Steves-digicams.com review of the PRO II clearly show the USB flash bay is enclosed in a structural frame (i.e. housing). However, the teachings of the PRO II fail to

explicitly suggest the housing is configured to shield electromagnetic interference. *Official Notice* is taken that constructing a drive bay of conductive material to shield electromagnetic interference was well known to one of ordinary skill in the art at the time of applicant's invention as evidenced by Kawagoe (col. 1, ll. 14-25). Providing electromagnetic shielding allows a device to operate properly without being negatively affected by other electronic devices in a computer chassis.

For claim 26:

The USB flash bay of claim 1, wherein the USB flash bay is capable of integrating in at least one of a standard three and one-half inch external drive bay and a five and one-fourth inch external drive bay disposed within the information handling system (paragraph 1 of page 1).

For claim 27:

The USB flash bay of claim 25, wherein the means for a USB flash bay is a faceplate containing the USB port (figure on page 1; second figure on page 2; both figures on page 3) and the flash card slot (figure on page 1; second figure on page 2; second figure on page 3), wherein a USB hub is communicatively coupled with the USB port and interfaced with a flash card reader controller which is communicatively coupled with the flash card slot (observe the picture on page 1, a USB port [inherently connected to a USB hub] is seen on the faceplate of the PRO II. Furthermore, the PRO II connects to an information handling system through USB [shown as a USB port in the figure on page 3] thus reassuring the fact that a USB hub controller is present in order to facilitate data transfer via USB.).

For claim 30:

The USB flash bay of claim 1, wherein the USB flash bay is capable of being enclosed in a housing (paragraph 1, page 1).

For claim 31:

The USB flash bay of claim 1, wherein the USB flash bay is enclosed in a housing including a connector port adapter suitable for connecting with a variety of information handling systems (As previously noted, the PRO II connects to the information handling system through a USB connection. USB is a widely accepted protocol that almost every information handling system supports, therefore the PRO II is suitable for connecting with a variety of information handling systems).

8. Claim 1-3, 7-11, 15-19, 23-24 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atech Flash and their product "PRO II USB MULTI-SLOT CARD READER/WRITER" as evidenced by a product review on Steves-digicams.com dated May 09, 2002 in view of what was well known in the art at the time of applicant's invention as evidenced by Batta et al. (US005262923A) and Kawagoe et al. (US 5,282,099).

Claims 1-8, 9-16, and 17-24 are substantially equivalent and will be treated as such for the remainder of the Office Action.

For claims 1, 9, 17 and 32-34:

A USB flash bay for an information handling system, comprising:

- a USB hub communicatively coupled with a USB port (observe the picture on page 1, a USB port [inherently connected to a USB hub] is seen on the faceplate of the PRO II. Furthermore, the PRO II connects to an information handling system through USB [shown as a USB port in the figure on page 3] thus reassuring the fact that a USB hub controller is present in order to facilitate data transfer via USB.) the flash card reader being operable as a USB mass storage device (as noted previously, the PRO II installs in a computer system using standard USB Mass Storage device drivers and provides Removable Disk icons representing each of the installed flash drivers);
- a flash card reader controller communicatively coupled with a flash card slot (A flash card reader controller is necessary to read/write data to/from the various memory cards the PRO II supports. As such, the flash card reader controller is inherently present) the flash card reader controller interfacing with the USB hub (As noted above, a USB is inherently present to facilitate data transfer with the information handling system via USB. Therefore, since the PRO II allows users of the information handling system to read/write from/to various memory card technologies the flash card reader controller must interface with the USB hub); and
- a faceplate including the USB port (figure on page 1; second figure on page 2; both figures on page 3) and the flash card slot (figure on page 1; second figure on page 2; second figure on page 3), wherein the USB flash bay is suitable for being integrated in a drive bay of the information handling system (paragraph 1 of page 1).

Official Notice is taken in that it would have been obvious to one of ordinary skill in the art to include a latching mechanism attached to the PRO II drive in order to secure the flash drive in the computer tower as evidenced by Batta et al. (col. 7, ll. 1-14; please see response to arguments above).

The various figures in the Steves-digicams.com review of the PRO II clearly show the USB flash bay is enclosed in a structural frame (i.e. housing). However, the teachings of the PRO II fail to explicitly suggest the housing is configured to shield electromagnetic interference. *Official Notice* is taken that constructing a drive bay of conductive material to shield electromagnetic interference was well known to one of ordinary skill in the art at the time of applicant's invention as evidenced by Kawagoe (col. 1, ll. 14-25). Providing electromagnetic shielding allows a device to operate properly without being negatively affected by other electronic devices in a computer chassis.

For claims 2, 10 and 18:

The USB flash bay of claim 1, wherein the USB flash bay is capable of integrating in at least one of a standard three and one-half inch external drive bay and a five and one-fourth inch external drive bay disposed within the information handling system (paragraph 1 of page 1).

For claims 3, 11, and 19:

The USB flash bay of claim 1, wherein the USB flash bay is capable of connecting to a peripheral power source and universal serial bus (both figures on page 3; paragraph 2 on page 3).

For claims 7, 15 and 23:

The USB flash bay of claim 1, wherein the USB flash bay is capable of being enclosed in a housing (paragraph 1, page 1).

For claims 8, 16 and 24:

The USB flash bay of claim 1, wherein the USB flash bay is enclosed in a housing including a connector port adapter suitable for connecting with a variety of information handling systems (As previously noted, the PRO II connects to the information handling system through a USB connection. USB is a widely accepted protocol that almost every information handling system supports, therefore the PRO II is suitable for connecting with a variety of information handling systems).

9. Claims 4, 12, 20, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atech Flash's PRO II as applied to claims 1, 9, 17, and 25 above in view of what was well known in the art at the time of applicant's invention as evidenced by Batta et al. (US005262923A) and Kawagoe et al. (US 5,282,099), and further in view of Intel (Communication and Networking Riser Specification Revision 1.2).

As noted above, the Atech Flash PRO II is a USB flash bay for an information handling system, comprising:

- a USB hub communicatively coupled with a USB port (observe the picture on page 1, a USB port [inherently connected to a USB hub] is seen on the faceplate of the PRO II. Furthermore, the PRO II connects to an information handling system through USB [shown as a USB port in the figure on page 3] thus reassuring the fact that a USB hub controller is present in order to facilitate data transfer via USB.) the flash card reader being operable as a USB mass storage device (as noted above, the PRO II installs in a computer system using standard USB Mass Storage device drivers and provides Removable Disk icons representing each of the installed flash drivers);
- a flash card reader controller communicatively coupled with a flash card slot (A flash card reader controller is necessary to read/write data to/from the various memory cards the PRO II supports. As such, the flash card reader controller is inherently present) the flash card reader controller interfacing with the USB hub (As noted above, a USB is inherently present to facilitate data transfer with the information handling system via USB. Therefore, since the PRO II allows users of the information handling system to read/write from/to various memory card technologies the flash card reader controller must interface with the USB hub); and
- a faceplate including the USB port (figure on page 1; second figure on page 2; both figures on page 3) and the flash card slot (figure on page 1; second figure on page 2; second figure on page 3), wherein the USB flash bay is suitable for being integrated in a drive bay of the information handling system (paragraph 1 of page 1).

The PRO II however does not expressly teach connecting the information handling system to the PRO II though a connection other than a USB cable.

Intel teaches in their specification "Communication and Networking Riser" revision 1.2, PC users' demand feature-rich PCs, combined with the industry's current trend towards lower cost, mandates higher levels of integration at all levels of the PC platform (paragraph 2, page 9). As such Intel has defined a motherboard riser named the Communication and Networking Riser that supports audio, modem, USB, and local area network (LAN) interfaces of core logic chipsets (paragraph 1, page 9). By integrating the various interfaces into a standard motherboard riser baseline implementation costs are reduced (paragraph 1 and 4, page 9). Furthermore, the CNR specifically addresses noise problems by physically separating noise-sensitive systems from the noisy environment of the motherboard (paragraph 3, page 9).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the Communication and Networking Riser of Intel into the USB flash bay (PRO II) of Atech Flash such that system degradation with respect to increased noise is reduced while at the same time a lower bill of materials cost is achieved.

10. Claims 5, 13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atech Flash's PRO II as applied to claims 1, 9, and 17 above in view of what was well known in the art at the time of applicant's invention as evidenced by Batta et al. (US005262923A) and Kawagoe et al. (US 5,282,099) and further in view of what was commonly known in the art.

As noted above, the Atech Flash PRO II is a USB flash bay for an information handling system, comprising:

- a USB hub communicatively coupled with a USB port (observe the picture on page 1, a USB port [inherently connected to a USB hub] is seen on the faceplate of the PRO II. Furthermore, the PRO II connects to an information handling system through USB [shown as a USB port in the figure on page 3] thus reassuring the fact that a USB hub controller is present in order to facilitate data transfer via USB.);
- a flash card reader controller communicatively coupled with a flash card slot (A flash card reader controller is necessary to read/write data to/from the various memory cards the PRO II supports. As such, the flash card reader controller is inherently present) the flash card reader controller interfacing with the USB hub (As noted above, a USB is inherently present to facilitate data transfer with the information handling system via USB. Therefore, since the PRO II allows users of the information handling system to read/write from/to various memory card technologies the flash card reader controller must interface with the USB hub); and
- a faceplate including the USB port (figure on page 1; second figure on page 2; both figures on page 3) and the flash card slot (figure on page 1; second figure on page 2; second figure on page 3), wherein the USB flash bay is suitable for being integrated in a drive bay of the information handling system (paragraph 1 of page 1).

The PRO II includes a single downstream USB port on the faceplate of the flash bay (figure on page 1; second figure on page 2; second figure on page 3;) for connectivity to a peripheral device. OFFICIAL NOTICE is taken in that it would have been obvious to one of ordinary skill in the art to include at least four USB ports on the faceplate such that the functionality of the information handling system is improved while at the same time providing enhanced connectivity to peripheral devices as evidenced by the Belkin in Hi-Speed USB 2.0 Drive Bay HUB-F5U261 discussed in the previous Office Action dated December 14, 2005. Furthermore due to applicant's lack of response to the providing of the Belkin in reference in the Office Action dated December 14, 2005 the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate.

11. Claims 6, 14, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atech Flash's PRO II as applied to claims 1, 9, and 17 above in view of what was well known in the art at the time of applicant's invention as evidenced by Batta et al. (US005262923A) and Kawagoe et al. (US 5,282,099), and further in view of Li (US 6,681,991 B1).

As noted above, the Atech Flash PRO II is a USB flash bay for an information handling system, comprising:

- a USB hub communicatively coupled with a USB port (observe the picture on page 1, a USB port [inherently connected to a USB hub] is seen on the faceplate of the PRO II. Furthermore, the PRO II connects to an information handling system through USB

[shown as a USB port in the figure on page 3] thus reassuring the fact that a USB hub controller is present in order to facilitate data transfer via USB.);

- a flash card reader controller communicatively coupled with a flash card slot (A flash card reader controller is necessary to read/write data to/from the various memory cards the PRO II supports. As such, the flash card reader controller is inherently present) the flash card reader controller interfacing with the USB hub (As noted above, a USB is inherently present to facilitate data transfer with the information handling system via USB. Therefore, since the PRO II allows users of the information handling system to read/write from/to various memory card technologies the flash card reader controller must interface with the USB hub); and
- a faceplate including the USB port (figure on page 1; second figure on page 2; both figures on page 3) and the flash card slot (figure on page 1; second figure on page 2; second figure on page 3), wherein the USB flash bay is suitable for being integrated in a drive bay of the information handling system (paragraph 1 of page 1).

As shown in various pictures, the PRO II includes 3 flash card slots for connecting 5 flash card types. Therefore while the PRO II supports at least 5 flash card slots, it does not expressly teach using at least 5 flash card slots.

Li teaches a card reading device having a multi-functional connector. The card reading device (Fig. 1 and 2) comprises five flash card slots **11** for reading/writing to a variety of memory cards (e.g., SD, MS, CF, SM, SC, MMC, MD) (col. 2, ll. 33-43).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement a dedicated flash slot for each memory card type as in the card-reading device of Li into the PRO II of Atech Flash such that a larger quantity of memory cards may be housed and serviced simultaneously.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M. Stiglic whose telephone number is 571.272.3641. The examiner can normally be reached on Monday - Friday (6:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571.272.3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RMS

PAUL R. MYERS
PRIMARY EXAMINER